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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
BARQADLE, YASIN M	

ART UNIT	PAPER NUMBER
2456	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/712,156	BOZAK ET AL.	
	Examiner	Art Unit	
	YASIN M. BARQADLE	2456	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-8,19,21,23 and 24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-8,19,21 and 23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/24/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment

1. The amendment filed on October 24, 2008 has been fully considered but are not deemed persuasive.

- Claims 9-18 have been withdrawn.
- Claims 1-8, 19 and 21 have been amended
- Claims 23 and 24 are added.
- Claims 1-8 and 19,21 and 23-24 are presented for examination.

Response to Arguments

2. Applicant's response to specification objection regarding the failure to provide proper antecedent basis for the claimed subject matter of "computer-readable medium" is not persuasive. Page 15, lines 15-20 do not clearly anticipate a "computer-readable medium" as suggested by 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Therefore, the objection to the specification is maintained.

Applicant argues, the cited portions of Barrett disclose identification signals that are used to determine active communication channels and buffer sizes for channel reception blocks (page 12 lines 1-3), Applicant also argues "Barrett does not disclose "data describing an application process in a grid computing environment, wherein the data identifies the application process and

computational processing requirements of the application process," as recited in amended claim 1. Applicant further submits that the Office Action fails to point out, and there is no teaching or suggestion of, "grid computing" in Barrett" Page 12, lines 3-8). The Examiner respectfully disagrees. It seems the Applicant is arguing against the references individually; however one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). For example Bantz USPN. (7,010,596) is relayed upon to teach the limitation of "grid computing". While the rest of the limitation is taught by Barrett. For example, Barrett teaches (user application such as user application 60 in FIG. 4 communicates with the multi-path channel interface such as interface 61 in FIG. 4 by means of messages directing the MPC to allocate, activate, and deactivate multi-path channel groups, and to start sending data and complete sending data. In response to these signals, MPC 61 (or MPC 72) creates the logical multi-path channel groups, activates these groups for actual transmission of data and notifies the user to begin sending data or to begin receiving data... Communication between the MPCs 61 and 72 is by way of exchange identification (XID) signals which convey the necessary information to the remote partner for enabling and disabling transmission paths. In accordance with the present invention, these sub-channel activate signals include means for activating unbalanced transmission groups and for

notifying the remote partner of currently available buffer and data link sizes, thereby permitting dynamic changes in the transmission group assignments to take advantage of, or to conform to, the currently available facilities. In FIGS. 5 and 6 there are shown a typical XID message used by the MPCs 61 and 72 of FIG. 4 to accomplish these results." (Col. 8, lines 49 to col. 9, line 10 and col. 10, lines 12-51). Berrett's teaching of "exchange identification (XID) signals which convey the necessary information to the remote partner for enabling and disabling transmission paths.", and "notifying the remote partner of currently available buffer and data link sizes, thereby permitting dynamic changes in the transmission group assignments to take advantage of, or to conform to, the currently available facilities.", meets applicant's arguments of the amended limitation.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claims 19 and 20 recite "computer-readable medium" there is no mention of such claimed subject matter in the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-8 and 19,21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett et al U.S. Patent Number (5699532) hereinafter "Barrett" in view of Sridhar et al U.S. Patent Number (6098108), hereinafter "Sridhar" further in view of Bantz USPN. (7,010,596).

As per claim 1 and 19, Barrett teaches a method and a computer-readable medium that stores a set of instructions, when executed, performs a method comprising:

sending a request for data describing an application process in computing environment (col. 8, lines 49-64 and fig. 5), wherein the data identifies the application process and computational processing requirements of the application process (col. 9, lines 2-25 and lined 45-65). See also col. 11, lines 14-58);

receiving the data describing the application process in the computing environment (col.9, lines 2-25 and lined 45-65. See also col. 11, lines 14-58);

receivinq one or more lists of available resources from one or more

computer devices (user application such as user application 60 in FIG. 4 communicates with the multi-path channel interface such as interface 61 in FIG. 4 by means of messages directing the MPC to allocate, activate, and deactivate multi-path channel groups, and to start sending data and complete sending data. In response to these signals, MPC 61 (or MPC 72) creates the logical multi-path channel groups, activates these groups for actual transmission of data and notifies the user to begin sending data or to begin receiving data... Communication between the MPCs 61 and 72 is by way of exchange identification (XID) signals which convey the necessary information to the remote partner for enabling and disabling transmission paths. In accordance with the present invention, these sub-channel activate signals include means for activating unbalanced transmission groups and for notifying the remote partner of currently available buffer and data link sizes, thereby permitting dynamic changes in the transmission group assignments to take advantage of, or to conform to, the currently available facilities." (Col. 8, lines 49 to col. 9, line 10 and col. 10, lines 12-51);

receiving, from an application process, a document specifying a communication protocol and a communication channel "The XID message of FIG. 5 comprises a header field 90 identifying the type of local station, the address of the destination and the length of the XID message. Field 91 carries an identification of the multi-path channel group to be activated while field 92 contains the status of the multi-path channel group (active or inactive). Field

93 contains an identification of a particular user protocol, for example, the SNA protocol" col. 9, lines 8-31 and col. 16, lines 47-52);

reading the document (col. 7, lines 9-54);

determining whether the communication channel requires communication with at least one of the computer device (col. 11, lines 14-43);

instantiating, based on the list of available resources from required computer devices ((Col. 8, lines 49 to col. 9, line 10 and col. 10, lines 12-51), the communication channel with the application process using the communication protocol (A user application such as user application 60 in FIG. 4 communicates with the multi-path channel interface such as interface 61 in FIG. 4 by means of messages directing the MPC to allocate, activate, and deactivate multi-path channel groups, and to start sending data and complete sending data" col. 8, lines 49-64 and col. 9, lines 39-59);

communicating with the application process using the communication protocol through the communication channel (col. 9, lines 39-59. See also col. 11, lines 44-51); and

receiving communications from the application process using the communication protocol through the communication channel (Once the sub-channels of a transmission group are physically enabled, one or more exchange identification (XID) messages are exchanged between the two ends of each sub-channel to prepare for the transmission of user data. As discussed in connection with FIGS. 5 and 6, part of this exchange may be to determine the

user protocols and to negotiate desired transmission parameters such as buffer sizes or link sizes. Col. 8, lines 49-64 and col. 9, lines 39-59. See also col. 11, lines 44-51).

Although Barrett shows substantial features of the claimed invention, Barrett is silent regarding accessing properties (file) information reflecting addresses of computer devices.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the system disclosed by Barrett, as evidenced by Sridhar USPN. (6098108).

In analogous art, Sridhar whose invention is about distributed directory for enhanced network communication discloses accessing properties information reflecting addresses of computer devices (col. 25, lines 9-56). Giving the teaching of Sridhar, a person of ordinary skill in the art would have readily recognized the desirability and the advantage of modifying Barrett by employing the distributed directory system of Sridhar in order to provide communication services needed to communicate using specified enhanced communication protocol and to forward packets to the appropriate device based on the accessed network address.

Although Barrett and Sridhar show substantial features of the claimed invention including using a distributed information system in network

communication (abstract: Sridhar), they do not explicitly teach using a grid computing system.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the system disclosed by Barrett and Sridhar, as evidenced by Bantz USPN. (7,010,596).

In analogous art, Bantz whose invention is about a system for allocation of Grid Computing to network stations, discloses a grid computing system for sharing workstation resources of under utilized resources on workstations in a computer network while maintaining the integrity and performance parameters of the individual workstations relative to their interactive workload. Plurality of workstation resources are also provided. (Col. 2, lines 38-42 and abstract). Giving the teaching of Bantz, a person of ordinary skill in the art would have readily recognized the desirability and the advantage of modifying Barrett and Sridhar by employing the grid computing system of Bantz "whereby effective use may be made of the under utilized resources of the workstations on a network without impacting the interactive performance or integrity of the workstations." Col. 2, lines 38-42).

As per claim 3, Barrett teaches the method of claim 1 wherein the data comprises degree of consumption of a resource by the application process (col. 7, lines 34-45 and col. 10, lines 12-30)

As per claim 4, Barrett teaches the method of claim 3 wherein the data further comprises a definition of the resource (col. 7, lines 34-45 and col. 10, lines 12-30 and fig. 5-6).

As per claim 5, Barrett teaches the method of claim 3 wherein the resource comprises one or more of a central processing unit, memory, socket bindings, memory storage space, and communication bandwidth (col. 7, lines 34-45 and col. 10, lines 12-30).

As per claim 6-8, Barrett shows performing actions (commands) such allocate, de-allocate process to the application process and wherein the action is one of start, stop, wait, resume, and change priority (Barrett's application process is capable of receiving and executing commands Col. 7, lines 34-45 and col. 8, lines 3-11 and 49-65).

Regarding claim 21, this is system claim with the same limitations as claim 1 and 19 above. There it is rejected with the same rationale. Barrett further teaches a memory and a processor (see fig. 3 and fig. 4).

As per claims 23, Bantz taches the method of claim 21, wherein the data further comprises the degree of consumption of a resource by the application process (Abstract).

As per claims 24, Barret teaches the method of claim 23, wherein the data further comprises a definition of the resource (col.9, lines 2-25 and lined 45-65. See also col. 11, lines 14-58. See figures 5 and 6).

Conclusion

5. **ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yasin Barqadle whose telephone

number is 571-272-3947. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yasin M Barqadle/

Primary Examiner, Art Unit 2456